WEEKDAY WONDERS

Content developed by the Tennessee Aquarium Education Department

TENNESSEE AQUARIUM

Diversity of Living Things: Day 5

This week through Weekday Wonders, young scientists will delve into the diversity of living things. The week starts with your scientist discovering basic physical characteristics of animals. Then scientists will explore how these characteristics are tools to help sort animals into groups. Young scientists finish the week by looking at how the differences in these characteristics, even within the same group, play an important role in their survival.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the Introduction to Weekday Wonders.

Question of the Day

Why is it important for animals of the same kind to have different characteristics?

Daily Nature Journal

Ask your young scientists to spend some time outside completing their daily nature journal. Use the Guide to Nature Journaling to support them in nature journaling each day. Encourage your scientist to find a different spot or perspective from yesterday. Your scientist may be surprised how different his or her observations can be with a simple change.

Dressed for Success

Ask your young scientist to color the two Dressed for Success Moths on page 3 using different colors and patterns. Then have your scientist cut the two moths out.

Have your young scientist try to find objects in the house that are the same color(s) as one of the moths. Tell him or her to place both moths on the object and take a few steps back then consider the following.

- Which moth is harder to see?
- Why is it harder to see?

- If the moths were hiding from a predator that was hunting for moths, which moth would avoid being found and eaten? Why?

Now have your young scientist search for a place that the other moth would be better hidden. Share with them that an animal's coloration can help them be camouflaged in the environment. As a result their colors can help the animal stay safe, avoid predators, and sneak up on its own food.

A Hungry Tenrec

Choose an area for your young scientist to play. This could be the yard or floor but could also be a multi-colored piece of fabric, wrapping paper, or tile.

Gather at least 10 "insects" in each of three different colors for a total of 30 objects. These might be 2-3" pieces of different-colored yarn, a box of tri-colored pasta, colored paper clips, or colored toothpicks. At least one of the colors should be close to a color in the area for play.

Scatter the "insects" around the playing area. Tell your scientist that he or she is going to be a hungry tenrec, which is a small animal that looks similar to a hedgehog. If your scientist would like to see a tenrec and learn more about them, you can share the second half of the video, "Hey Rocky! Watch Me Pull a Tenrec Out of My Hat!" starting at timestamp 16:45.

Tell your scientist that one of the foods tenrecs eat is insects. As a tenrec, your scientist will need to find at least six insects to survive, but he or she will only have 15 seconds to find them. Adjust the amount of time and number of insects to fit your scientist.

Start the timer and have your "hungry tenrec" run to catch (pick-up) the first six insects he or she finds. After the allotted time, ask your scientist to sort his or her insects by color and make some observations.

- Did s/he find all three colors of insects?
- Did s/he find them in equal numbers? If not, why does your scientist think he or she found the color(s) s/he did? Why didn't s/he find the other color(s)?

Continue to allow your scientist to repeat the gathering. You can allow more or less time and see if the results are the same as far as the colors that your scientist finds more easily. Ask your scientist—if these were real insects, which would be best able to hide and therefore survive? How does color play a role?

Nature Journal

Ask your young scientist to think back to activities of today or from the week. Have your scientist think about the differences in physical characteristics of an animal and how those traits help the animal to survive. Then s/he should write and/or illustrate a story about an individual animal that is physically a little different from others of its same kind, such as a giraffe with a longer neck, a bird with shorter wings, or maybe a variation of his or her favorite animal. How is the individual different? How does this animal's difference end up helping the animal survive? Encourage your scientist to be creative in exploring and expressing the value in being different.

Dressed for Success Moths